

Department of Science and Humanities Board of Studies – B.Sc. (Mathematics, Statistics, Computer Science) Minutes of Meeting

Date: 08. 07. 2017

Members Present:

- 1. Dr.N.Srinivasu, HoD and Chairman, VFSTR University
- 2. Dr.R.SrinivasaRao, Professor of Mathematics, RVR & JC College
- 3. Dr.P.L.N. Varma, Professor of Mathematics, VFSTR University
- 4. Dr.P.Kalpana, Asst. Professor, VFSTR University
- 5. Mr.U. V.Manoj Kumar, Asst. Professor, VFSTR University

The Board of Studies members met today and discussed the syllabus of various courses for the proposed B.Sc.Course. It is decided that the curriculum follows choice based credit system. Stakeholder's feedback has been considered in designing this curriculum. The finalised course structure is given in appendix I.All the courses cater to either employability, entrepreneurship or skill development (appendix II).

After detailed discussion, the syllabus for the following courses was finalised.

Domain Specific Course 1- Mathematics

Semester I	DSC-1 Paper 1	Differential Equations		
Semester II	DSC-1 Paper 2	Geometry		
Semester III	DSC-1 Paper 3	Group Theory		
Semester IV	DSC-1 Paper 4	Real Analysis		
Semester V	DSC-1 Paper5	Ring Theory and Vector Calculus		
Semester v	DSC-1 Paper 6	Linear Algebra		
DCC 1 Doman 7		Laplace Transformations		
	DSC-1 Paper 7 (Elective)	Numerical Analysis		
	(Elective)	Number Theory		
		Cluster (A)		
Semester VI		Integral Transformations		
	DSC-1 Paper 8,9, 10	Advanced Numerical Analysis		
	(Cluster Elective)	Project work		
		Cluster (B)		
		Mechanics		

	Fluid Mechanics
	Project Work
	Cluster (C)
100	Graph Theory
	Applied Graph Theory
	Project Work

Domain Specific Course 2 – Statistics(with Mathematics Combination)

Semester I	DSC-2 Paper 1	Descriptive Statistics and Probability, Practicals
Semester II	DSC-2 Paper 2	Mathematical Expectations and Probability Distributions, Practicals
Semester III	DSC-2 Paper 3	Statistical Methods, Practicals
Semester IV	DSC-2 Paper 4	Statistical Inference, Practicals
Samatan V	DSC-2 Paper 5	Sampling Techniques and Design of Experiments, Practicals
Semester V	DSC-2 Paper 6	Stastical Quality Control and Reliability, Practicals
	DSC-1 Paper 7 (Elective)	Applied Statistics, Practicals Computer Programming and Data Analytics, Practicals
Semester VI	DSC-1 Paper 8, 9 & 10 (Cluster Electives)	Cluster (D) Operations Research Econometrics Project work

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(Dr. P. L. N. Varma)

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Q.Su~~~ (Dr. R. Srinivasa Rao)

(Dr. P. Kalpana)

The Structure of the Course – Semester wise

Course Code	Course Title	L	T	P	С
	English I	3			3
	English Proficiency and Communication Skills I	3			3
	Environmental Studies	2			2
	Fundamentals of Computer Science I	2			2
	Fundamentals of Computer Science I Lab			2	1
	Differential Equations	5			5
	Descriptive Statistics and Probability	4			4
	Descriptive Statistics and Probability Lab			2	1
	Computer Fundamentals and Photoshop	4			4
	Computer Fundamentals and Photoshop Lab			2	1

Semester II

Course Code	Course Title	L	T	P	С
	English II	3			3
	English Proficiency Communication Skills II	3			3
	General Studies I	2			2
	Fundamentals of Computer Science II	2			2
	Geometry	5			5
	Mathematical Expectations and Probability Distributions	4			4
	Mathematical Expectations and Probability			2	1
	Distributions Lab				1
	Programming in C	4			4
	Programming in C Lab			2	1

Semester III

Course Code	Course Title	L	Т	P	С
	Business English Communication I	3			3
	Business English Communication II	3			3
	Analytical Skills I	2			2
	General Studies II	2			2
	Group Theory	5			5
	Statistical Methods	4			4
	Statistical Methods Lab			2	1
	Data Structures	4			4
	Data Structures Lab			2	1

Semester IV

Course Code	Course Title	L	T	P	С
	Analytical Skills II	2			2
	General Studies III	2			2
	Employability Skills	2			2
	Human Values / Professional Ethics	2			2
	Real Analysis	5			5
	Statistical Inference	4			4
	Statistical Inference Lab			2	1
	Object Oriented Programming using Java	4			4
	Object Oriented Programming using Java Lab			2	1

Semester V

Course Code	Course Title	L	T	P	С
	Ring Theory and Vector Calculus	5			5
	Linear Algebra	5			5
	Sampling Techniques and Design of Experiments	4			4
	Sampling Techniques and Design of Experiments Lab			2	1
	Quality, Reliability	4			4
	Quality, Reliability Lab			2	1
	DBMS	4			4
	DBMS Lab			2	1
	Software Engineering	4			4
	Software Engineering Lab			2	1

Semester VI

Course Code	Course Title	L	T	P	С
	Paper – 7*				
	Laplace Transformations	5			5
	Numerical Analysis)			3
	Number Theory				
	Cluster Electives**				
	Cluster (A)				
	Integral Transformations				
	Advanced Numerical Analysis				
	Project Work				
	Cluster (B)				
	Mechanics	5+5			5+5+6
	Fluid Mechanics				
	Project Work				
	Cluster (C)				
	Graph Theory				
	Applied Graph Theory				
	Project Work				
	Paper – 7*	5			5
	Applied Statistics	ر ا			3

Computer Programming and Data Analytics			
Cluster Electives			
Cluster (D)			
Operations Research	5+5		5+5+6
Econometrics			
Project work			
Paper – 7*			
Operating Systems	5		5
Computer Network	3		3
Web Technologies			
Cluster Electives			
Cluster (E)			
Foundations of Data Science			
Big Data Technology			
Computing for Data Analysis			
Project Work	5+5		5+5+6
Cluster (F)			
Distributed Systems			
Cloud Computing			
Grid Computing			
Project Work			

^{*}Candidate will choose one paper from paper 7 in each subject
**Candidate will choose any one cluster and studies two subjects in that cluster along with the project.

English I Skill development English Proficiency and Communication Skills I **Employability Environmental Studies** Skill development Fundamentals of Computer Science I with Lab Skill development **Differential Equations** Skill development Descriptive Statistics and Probabilitywith Lab Skill development Computer Fundamentals and Photoshop with Lab Skill development English II Skill development **English Proficiency Communication Skills II Employability** General Studies I Skill development Fundamentals of Computer Science II Skill development Skill development Geometry Mathematical Expectations and Probability Skill development Distributions with Lab Programming in C with Lab Skill development **Business English Communication I Employability Business English Communication II Employability** Analytical Skills I **Employability** General Studies II **Employability** Group Theory Skill development Statistical Methodswith Lab Skill development Data Structures with Lab Skill development Analytical Skills II Skill development General Studies III Skill development **Employability Skills Employability** Human Values / Professional Ethics **Employability** Real Analysis Skill development Statistical Inference with Lab Skill development Object Oriented Programming using Javawith Lab Skill development Ring Theory and Vector Calculus Skill development Linear Algebra Skill development Sampling Techniques and Design of Skill development Experimentswith Lab Quality, Reliability with Lab Skill development **DBMSwith Lab** Skill development Software Engineeringwith Lab Skill development **Laplace Transformations** Skill development Numerical Analysis Skill development Number Theory Skill development **Integral Transformations** Skill development Advanced Numerical Analysis Skill development Skill development Mechanics Fluid Mechanics Skill development Skill development **Graph Theory** Applied Graph Theory Skill development **Applied Statistics** Skill development Computer Programming and Data Analytics Skill development **Operations Research** Skill development **Econometrics** Skill development **Operating Systems** Skill development Computer Network Skill development Web Technologies Skill development Foundations of Data Science Skill development Big Data Technology Skill development Computing for Data Analysis Skill development Distributed Systems Skill development **Cloud Computing** Skill development **Grid Computing** Skill development Project Work Skill development

English I	New	Course
English Proficiency and Communication Skills I		Course
Environmental Studies		Course
Fundamentals of Computer Science I with Lab		Course
Differential Equations		Course
Descriptive Statistics and Probability with Lab		Course
Computer Fundamentals and Photoshop with Lab		Course
English II		Course
English Proficiency Communication Skills II	New	Course
General Studies I	New	Course
Fundamentals of Computer Science II	New	Course
Geometry	New	Course
Mathematical Expectations and Probability	New	Course
Distributions with Lab		
Programming in C with Lab	New	Course
Business English Communication I	New	Course
Business English Communication II	New	Course
Analytical Skills I	New	Course
General Studies II	New	Course
Group Theory	New	Course
Statistical Methods with Lab	New	Course
Data Structures with Lab	New	Course
Analytical Skills II	New	Course
General Studies III	New	Course
Employability Skills	New	Course
Human Values / Professional Ethics	New	Course
Real Analysis	New	Course
Statistical Inference with Lab	New	Course
Object Oriented Programming using Java with	New	Course
Lab		
Ring Theory and Vector Calculus	New	Course
Linear Algebra	New	Course
Sampling Techniques and Design of Experiments	New	Course
with Lab		
Quality, Reliability with Lab	New	Course
DBMS with Lab		Course
Software Engineering with Lab		Course
Laplace Transformations		Course
Numerical Analysis		Course
Number Theory		Course
Integral Transformations	New	Course

Advanced Numerical Analysis New Course Mechanics New Course Fluid Mechanics New Course New Course Graph Theory Applied Graph Theory New Course **Applied Statistics** New Course Computer Programming and Data Analytics New Course Operations Research New Course **Econometrics** New Course **Operating Systems** New Course Computer Network New Course Web Technologies New Course Foundations of Data Science New Course Big Data Technology New Course Computing for Data Analysis New Course Distributed Systems New Course **Cloud Computing** New Course **Grid Computing** New Course Project Work New Course New Course **Integral Transformations** Advanced Numerical Analysis New Course Mechanics New Course Fluid Mechanics New Course Graph Theory New Course Applied Graph Theory New Course **Integral Transformations** New Course **Advanced Numerical Analysis** New Course Mechanics New Course Fluid Mechanics New Course Graph Theory New Course Applied Graph Theory New Course